Quality of Steel

2934. SHRI HARVENDRA SINGH HANSPAL: Will the Minister of STEEL AND MINES be pleased to state:

(a) whether the Research and Development Centre for Iron and Steel (RDCIS) of the Steel Authority of India Limited (SAIL) has initiated several projects as part of its campaign to improve the quality of steel products in the country;

(b) if so, what are the details thereof; and

(c) the extent to which the improvement in the quality of steel products is likely to be achieved as a result thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF MINES IN THE MINISTRY OF STEEL AND MINES (SHRIMATI RAM DULARI SINHA): (a) Yes, Sir.

(b) One of the primary objectives of R&D Centre is to make continuous efforts to improve quality of steel to match the stringent quality requirements of the customers. Steel quality improvement starts right from raw material stage and continues through different stages of processing, that is, sinter making, coke making, iron making steel making and subsequent finishing in integrated steel making operations. The R & D efforts that are being made at all these stages in the Steel Plants basically aim at either increase in productivity and/or steel quality improvement. Some of the important R&D efforts subsequent to steel making stage which have led to improvement in quality of steel products are:—

1. Sulphide shape control of critical steels for improvement in mechanical properties at Rourkela Steel Plant and Bokaro Steel Limited;

2. Improvement in dephosphorisation of steel made in electric are furnace of Alloy Steel Plant for improved cleanliness of various alloy steels;

3. Combined blowing in LD converters at Bokaro Steel Limited for improved cleanliness of steel;

4. Scale loss reduction in wire rod mill through accelerated coling ensuring superior surface quality of wire rods produced at Bhilai Steel Plant;

5. Roll pass lubrication in section mills of Durgapur Steel Plant for better surface quality of products;

6. Development of cold rolling oil for improved surface finish of cold rolled steels at Rourkela Steel Plant;

7. Improvement in quality of LPG Cylinder grade steel by development of concast slabs at Bhilai Steel Plant;

8. Development of pressure vessel steel of superior quality by suitable alloying to retain requisite strength after stress relief anneal;

9. High strength rails of superior surface quality and internal structure by LD concast route at Bhilai Steel Plant;

10. Improvement in forming characteristics of deep drawing quality steels by boron treatment;

11. Introduction of argon purging. Technique for inclusion control at Alloy Steels Plant.

(c) The products on being developed are regularly manufactured in the concerned steel plants of Steel Authority of India Limited for supply to customers against their orders. Such endeavour for quality improvement is a continuing process.